Serial No. 08/984,476

LISTING OF THE CLAIMS:

86. (Currently amended) An isolated polypeptide which consists glucose dependent insulinotropic polypeptide (GIP) antagonist consisting essentially of SEQ ID NO:5.

- 87. (Previously presented) The isolated polypeptide of claim 86 wherein His at position 9 of SEQ ID NO: 5 is replaced with Arg or Lys.
- 88. (Previously presented) The isolated polypeptide of claim 86 wherein His at position 9 of SEQ ID NO:5 is replaced with Arg.
- 89. (Previously presented) A composition comprising the isolated polypeptide of claim 86 or claim 88 in a pharmaceutically acceptable vehicle.
- 90. (Currently amended) A composition comprising the an isolated polypeptide glucose-dependent insulinotropic (GIP)antagonist of claim 86 and 88 consisting of the amino acid sequence of SEQ ID NO:5 and an isolated polypeptide consisting of the amino acid sequence of SEQ ID NO:5 wherein Arg is at position 9 in a pharmaceutically acceptable vehicle.
- 91. (Previously presented) The composition of claim 89 or claim 90 further comprising an inert pharmaceutical excipient selected from the group consisting of sweetening, flavoring, coloring, dispersing, disintegrating, binding, granulating, suspending, wetting, preservative and demulcent agents.
- 92. (Previously presented) The composition of claim 89 wherein the composition is lyophilized.
- 93. (Withdrawn from consideration) A method of identifying an antagonist of GIP receptor, comprising obtaining a candidate compound, contacting a cell which expresses

Serial No. 08/984,476

said GIP receptor on its surface with said candidate compound and determining whether or not said candidate compound competitively inhibits the binding of the isolated polypeptide of claim 86 or claim 88 to said GIP receptor.

- 94. (Currently amended) A screening method to identify a glucose-dependent insulinotropic (GIP) receptor antagonist comprising obtaining a candidate polypeptide, contacting a cell which expresses GIP receptor on its surface with said candidate compound and determining whether or not said candidate compound competitively inhibits the binding of the isolated polypeptide of claim 86 or claim 88 to said GIP receptor identified by the method of claim 93.
- 95. (Withdrawn from consideration) A method for reducing postprandial insulin levels in a host, comprising administering to a host in need thereof a therapeutically effective amount of the polypeptide of claim 86.
- 96. (Withdrawn from consideration) A method for reducing postprandial insulin levels in a host, comprising administering to a host in need thereof a therapeutically effective amount of the polypeptide of claim 88.
- 97. (Withdrawn from consideration) A method for inhibiting GIP binding to GIP receptor in a host, comprising administering to a host in need thereof a therapeutically effective amount of the polypeptide of claim 86.
- 98. (Withdrawn from consideration) A method for inhibiting GIP binding to GIP receptor in a host, comprising administering to a host in need thereof a therapeutically effective amount of the polypeptide of claim 88.
- 99. (Currently amended) An isolated polypeptide <u>glucose-dependent insulinotropic</u>
 (GIP) antagonist <u>comprising consisting essentially of a 21-residue amino acid</u> sequence at

Serial No. 08/984,476

least 95% identical to the corresponding amino acids of SEQ ID NO:5 wherein one neutral amino acid selected from position 3,4,8,14,17, 18 and 19 of SEQ ID NO:5 is replaced with a non-identical amino acid selected from the group consisting of valine, proline, leucine, isoleucine, glycine, and alanine and wherein said polypeptide exhibits at least the GIP antagonist activity of SEQ ID NO:5.

- 100. (Currently amended) The isolated polypeptide of claim 86 99 wherein a the neutral amino acid-isoleucine selected from the group consisting of amino acids at position 3, 14, 17, 18 and 19 positions 3 and 8 in SEQ ID NO:5 is replaced with a different neutral amino acid selected from the group consisting of valine, proline, leucine, glycine, and alanine and wherein said polypeptide exhibits at least the GIP antagonist activity of SEQ ID NO:5.
- 101. (Currently amended) The isolated polypeptide of claim 100 wherein the different neutral amino acid is selected from the group consisting of <u>valine</u> and <u>proline</u> valine, <u>proline</u>, <u>leucine</u>, <u>isoleucine</u>, <u>glycine</u>, and <u>alanine</u>.
- 102. (Previously presented) The isolated polypeptide of claim 86 wherein the aspartic acid at position 6 or 12 of SEQ ID NO: 5 is replaced with glutamic acid.
- 103. (Previously presented) The isolated polypeptide of claim 86 wherein the aspartic acid residues at positions 6 and 12 of SEQ ID NO:5 are replaced with glutamic acid.
- 104. (Previously presented) The isolated polypeptide of claim 86 wherein histidine at position 9 of SEQ ID NO:5 is replaced with lysine.
- 105. (Withdrawn from consideration) A method for reducing glucose absorption in a mammalian intestine, comprising administering to a mammal in need thereof, an effective amount of a pharmaceutical composition comprising the isolated polypeptide of claim 86 or claim 100.

Serial No. 08/984,476

106. (Withdrawn from consideration) The method of claim 105 wherein reducing glucose absorption in the mammalian intestine improves glucose tolerance.

- 107. (Withdrawn from consideration) The method of claim 106 wherein the mammalian intestine is human.
- 108. (Withdrawn from consideration) A method of inhibiting GIP binding to GIP receptor in a subject, comprising administering to said subject an effective amount of the composition of claim 89 in a pharmaceutically acceptable carrier.
- 109. (Withdrawn from consideration) The method of claim 108 wherein the composition further includes an inert pharmaceutical excipient selected from the group consisting of sweetening, flavoring, coloring, dispersing, disintegrating, binding, granulating, suspending, wetting, preservative and demulcent agents.
- 110. (Withdrawn from consideration) A method for reducing postprandial insulin levels in a subject, comprising administering to said subject an effective amount of the isolated polypeptide of claim 101 in a pharmaceutically acceptable composition.
- 111. (Withdrawn from consideration) A monoclonal antibody which recognizes the isolated polypeptide of claim 86.
- 112. (Withdrawn from consideration) The antibody of claim 111 wherein the antibody is lyophilized.
- 113. (Withdrawn from consideration) A composition comprising the antibody of claim111 in a pharmaceutically acceptable carrier.
- 114. (Withdrawn from consideration) A monoclonal antibody which recognizes the isolated polypeptide of claim 88.

Serial No. 08/984,476

115. (Withdrawn from consideration) The antibody of claim 114 wherein the antibody is lyophilized.

116. (Withdrawn from consideration) A composition comprising the antibody of claim

114 in a pharmaceutically acceptable carrier.